21. A piece comprising at least one metal hydride capable of absorbing hydrogen in a reversible manner, said piece being in the form of a thin and dense strip obtained by rolling a powder of said at least one metal hydride, said strip being obtained at a temperature lower than 400°C.

22. The piece according to claim 21 further comprising a first additional component for heat-related actions selected from the group consisting of supplying heat or evacuating heat.

23. The piece according to claim 22, wherein said first additional component is a binder for the powder of said at least one metal hydride.

24. The piece according to claim 21 further comprising a second additional component which is a binder for the powder of said at least one metal hydride.

25. The piece according to claim 24, wherein at least one of said first and said second additional components is in the form of a powder additive.

26. The piece according to claim 25, wherein said powder additive comprises Mg.

27. The piece according to claim 24, wherein at least one of said first and said second additional components is in the form of a tridimensional matrix that is rolled together with the powder of said at least one metal hydride.

28. The piece according to claim 27, said matrix comprising metal and having a porous structure.

29. The piece according to claim 24, wherein at least one of said first and said second additional components is in the form of a plate in direct contact with the powder of said at least one metal hydride.

30. The piece according to claim 24, wherein at least one of said first and said second additional components is in the form of a plate in direct contact with a tube selected from the group consisting of a tube containing said at least one metal hydride and a rolled tube containing said powder of said at least one metal hydride.

31. The piece according to claim 24, wherein at least one of said first and said second additional components are up to 50% of the weight of the whole piece.

32. The piece according to claim 31, wherein at least one of said first and said second additional components are up to 30% of the weight of the whole piece.

33. The piece according to claim 21, said strip having a thickness equal to or less than 1 mm.

34. The piece according to claim 21 wherein said powder of said at least one metal hydride is nanocrystalline.

35. The piece according to claim 34 wherein said at least one nanocrystalline metal hydride comprises MgH_2-5at.%.

36. The piece according to claim 21 wherein said strip is of a shape selected from the group consisting of straight, stacked, folded, spiral, curved, twisted and cut shapes.

37. The piece according to claim 21, said piece being formed to have intrinsic electric characteristics allowing measurement of its hydrogen content.

38. The piece according to claim 21, said piece being formed to have intrinsic electric characteristics allowing desorption of hydrogen by circulation of an electrical current.

39. A method for storing and transporting hydrogen in a tank, comprising use of a piece according to claim 21.

40. A method for stocking and transporting energy in a battery of the Ni-MH type, comprising use of a piece according to claim 21.